

DISABILITY: DEMOCRATISING ACCESS THROUGH ASSISTIVE TECHNOLOGY

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ABSTRACT

Disability is a natural phenomenon that can occur due to biological or anthropological causes. Disability hits differently to different social groups but the impact is mostly negative. Inclusion of the marginal community groups like Persons with Disabilities (PwD) is essential for a democratic polity. India is a developing country that is mandated as per the Article 41 of the constitution to ensure disablement doesn't cause disruption in access to assistance, education and work. In order to optimize human capital of India, assistive technology is the new breakthrough for enhancing productivity and dignity of persons with disabilities. However, challenges persist in accessibility and scope of assistive technology in India.

Keywords: Disability, Inclusion, Accessibility, Assistive Technology

Humans are highly evolved species that have been continuously making strides in science and technology sector. Inquisitiveness of mind when blended with motive of social welfare ushers a powerful combination. Democratization of technology channelizes skills of some to generate and disseminate benefits to all who require it the most. Since functionality of body and mind is the core of assistive technology, it can acquire any shape or form that facilitate human independence. Application of assistive technology produces tangible output that not only regulates but also enhances performance of an individual with disability. It can acquire any form like equipment, computer hardware-software, e-devices among others that basically reduce barriers faced on account of deficiency or discomfort in sensory experiences. It involves both production of goods and delivery of services for a particular section of the community. Assistive technology is a citizen centric model of technology that aims at multiplying choices, adding comfort and reducing barriers for humans with disabilities. It is a bare minimum qualification that all disabled individuals need for warding off exclusionary experiences. Thus, assistive technology is a shining example of fusing social justice with the emerging trends of the day.

LINK BETWEEN DISABILITY AND ASSISTIVE TECHNOLOGY

Affecting 15 percent of the global population, disability is a multi-dimensional and multi-sectoral issue that has implications for achievement of Sustainable Development Goals. Out of 15 percent population affected by disability, 3.8 percent is aged 15 and above that experience critical obstructions in daily life and depend on provision of health care services (WHO, 2021). Going by the 2011 India census data, 26.8 million of the population falls within the ambit of disability that constitutes approximately 2.21 percent of the population. Based on gender, 2.01 percent women and 2.41 percent males are disabled. Based on settlement, more concentration is visible in rural areas with 18 million disabled population while only 8.1 million in urban areas. Based on social category, 2.05 percent of total belongs to Scheduled Tribes-ST and 2.45 percent to Scheduled Castes-SC (MoSPI, 2021). According to the 76th round of National Sample Survey, the total persons with disability have increased from 2011 census figures to 1172.86 million wherein disability incidence amounts to 86 per 1,00,000 persons. Out of that, highest disability is recorded in locomotive related activities with a share of 1.4 percent followed by hearing disabilities (MoSPI, 2018, p.45-47).

There are various factors driving the demand for assistive technology. Disability comprise a sizeable share followed by ageing, health conditions/co-morbidities or consumerism that necessitates reliance on products and services which assure mental and health safety. As a result, the demand for assistive technology shall reach 2 billion globally, double of disabled population estimates, by 2050 (WIPO, 2021). Disability becomes a liability only when adequate means to deal with it are non-available. Thus, assistive technology is the route for re-assuring functionality of disabled sections coupled with the potential to unlock the trapped human capital. Assistive technology is the 21st century tool to revolutionize disability related issues.

ADVANTAGES OF ASSISTIVE TECHNOLOGY

- Pivot example of human right
- Bulwark against care economy
- Remedy for loss or impairment of individual capacity
- Strength against gradual functional decline and non-communicable diseases
- Dilute future secondary and tertiary hospital charges
- Prevents negative self-image
- Lowering of social stigma associated with disability
- Better access to primary social goods
- Repelling traps of poverty, hunger and illiteracy
- Enhance freedom and dignity

PROVISION FOR DISABLED IN INDIA

The Preamble of the constitution boldly upholds liberty, equality, justice, fraternity and dignity of all individuals. Article 41 of the Indian constitution is the source of enabling provisions by the state apparatus for the welfare of disabled groups. Under XI Schedule, Article 243-G entry 26 commits Panchayats towards social welfare that includes physical and mentally disability as well. Similarly, under Schedule XII, Article 243-W entry 9 enjoins urban local bodies to look into the interests of the weaker sections of the community under which Persons with disabilities or PwD are innately covered. In India Divyangjan is the new term adopted to refer to Persons with Disabilities.

Regarding legislative aspect, since 2007 India is committed towards United National Convention on the Rights of Persons with Disabilities (Narayan and John, 2017). Despite disability being a state subject under List II, Article 249 empowers the Parliament to legislate on any list matters in pursuance to international obligations. Thus, The Rights of Persons with Disabilities Act, 2016 is the contemporary Indian legislation that protects, promote and privileges disability affected population. By replacing the 1995 act, this act acknowledge the multiplicity of disabilities existent in India. With 21 disabilities recognised under the act, it covers broad range from physical, sound, visual, cognitive, blood among others. In line with that, Scheme for Implementation of the Rights of Persons with Disabilities Act, 2016 –SIPDA undertakes provisioning of financial assistance, skill development and inclusive spaces in education, work and recreation for accessibility improvement.

For the institutional mechanism, Department of Empowerment of Persons with Disabilities have been carved out of nodal Ministry of Social Justice and Empowerment in 2012 to specifically address issues of disability in India along with monitoring of schemes and projects.

Assistance to Disabled Persons for Purchase/Fitting of Aids and Appliances also known as ADIP Scheme is the leading example of government sponsored welfare in assistive technology sector. Since 1981 recovery of social, psychological, physical and economic aspects is essential to the said scheme that provides assistance mechanisms to disabled sections through affordable and accessible aid and assistive equipment (MoSJE, n.d.-a). To foster inclusion of disabled persons through an empowering and rehabilitation ADIP scheme, India is on track to regulate provision of external assistive devices that helps in generating internal capital. To ensure that the vulnerable rung of disabled community have an adequate access to modern day assistive products, competent authorities and agencies implement the provisions by granting complete cost assistance for products up to 15,000 rupees. Likewise for products costing above that price, half of the cost is borne by the central government. Difficulties in locomotion, vision, hearing, intellectual-development faculties, and leprosy among others have been recognised for inclusion under the scheme. Likewise, Rashtriya Vayoshri Yojana mandates provision of physical aids along with assistive devices for senior citizens of the country living below poverty line. Artificial Limbs Manufacturing Corporation- ALIMCO is the nodal agency responsible for its implementation.

Apart from schemes and policies, District Disability Rehabilitation Centres have been in existence from 1999-2000 with active support from national institutes, ALIMCO to provide data, organise awareness camps, facilitate loan process, medical services and assess the need of assistive devices (MoSJE, n.d.-b).

SCOPE OF ASSISTIVE TECHNOLOGY IN INDIA

In order to ensure that disability inclusive development takes place at all the levels of the economy, access to assistive technology products is crucial for all age groups i.e. children, youth, adult and senior citizens. The ADIP scheme list is narrower than 50 priority assistive products list given by World Health Organisation (WHO, 2016). Diversification and cost rationalisation of products is to be taken up sincerely by the government so that better coverage is achieved.

Only 21.8 percent of the persons with disabilities have acquired help or aids/devices directly from the government while 1.8 percent received from outside sources (PIB, 2019). Several national and international civil society organisations are involved in supply of assistive aids and appliances to the dedicated number of beneficiaries. This indicates lack of availability and inadequacy of government channels. Similarly, 5.1 percent of the persons with disabilities missed out on treatment options due to non-affordability (MoSPI, 2018, p.56). Despite being suggested to have aids/appliances, unaffordability issue affects 14.6 percent and unavailability affects 1.6 percent. However 61.8 percent of the persons with disabilities were not advised for aids or appliances (MoSPI, 2018, p.62). Such figure shows paucity of trained professionals /healthcare workers specialised in assistive technology induced care and treatment. Going beyond infrastructural accessibility, assistive technology is a matter of socio-economic accessibility and affordability. For example intellectual disability is under-researched area (Hatton and Emerson, 2015). The stigma associated with intellectual disabilities inhibits access to assistive products and acceptance has a relation with geographic location also (Boot et.al, 2021).

CONCLUSION

Assistive technology is an unregulated sector whose reach requires cross-ministerial administration. Ministries of Social Justice and Empowerment, Science and Technology, Health and Family Welfare, Commerce and Industry require uninterrupted coordination to facilitate India's ambition of becoming Assistive Technology hub in the world through focus on Make in India.

Untimely and under-diagnoses of health problems can create more burden on already disabled percentage. Empowerment of persons with disabilities is rights based model of governance. Accessibility to qualitative affordable products is need of the hour to prevent exclusion. Adequate financing, transparent disbursement, efficient monitoring, greater serviceability, impact assessment and enhanced acceptance shall culminate into inclusion of disabled sections. Special care must be undertaken to prioritise access to assistive technology products for vulnerable social groups among disabled sections such as women, children, aged, and transgenders. Henceforth 2030

agenda of 'Leaving no one behind' Sustainable Development Goal shall be realised when inequalities in health are addressed through democratic access of inclusive assistive technology in India.

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